

20011207.qrp v02_n398.qrl.20011207

Date: Fri, 7 Dec 2001 19:03:09 EST
From: qrp-1@Lehigh.EDU
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: QRP-L digest 2398

QRP-L Digest 2398

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- 2) [114169] Coax Antenna Question
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- 3) [114170] Re: [Non-Participants Point Of View.....]
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- 4) [114171] [Elmer 101] SW-20+ "Audio IC" Question..
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- 6) [114173] Re: New little bitty paddle (MFJ)
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- 7) [114174] Re: [Elmer 101] Power supply (part 2)
by "Paul Harden, NA5N" <na5n@rt66.com>
- 8) [114175] Re: 80 osc/transmitter
by "Doug Hendricks" <ki6ds@dph.dpol.net>
- 9) [114176] Re: [Elmer 101] SW-20+ "Audio IC" Question..
by "Glen Leinweber" <leinwebe@mcmail.cis.mcmaster.ca>
- 10) [114177] Isotron Antennas
by W2AGN <w2agn@pobox.com>
- 11) [114178] Re: Coax Antenna Question
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- 12) [114179] Re: [Elmer 101] SW-20+ "Audio IC" Question..
by "w8diz" <w8diz@fpqrp.com>
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- 14) [114181] Re: Isotron Antennas
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- 17) [114184] Re: Great Parts Source (and probes)
by "Brad Hernlem" <alihernlem@hotmail.com>
- 18) [114185] Re: speaking of publishing articles...
by Stephan Greene <sgreene@patriot.net>
- 19) [114186] Re: DCTL woes (now N4RT Windom)

- by thomasr2@gdls.com
- 20) [114187] Re: [Elmer 101] SW-20+ "Audio IC" Question..
by "Glen Leinweber" <leinwebe@mcmail.cis.mcmaster.ca>
 - 21) [114188] Re: Isotron Antennas
by W2AGN <w2agn@pobox.com>
 - 22) [114189] [Elmer 101] SW-20+ "Audio IC" Question..
by "Phinizy, William" <wphinizy@filenet.com>
 - 23) [114190] Re: TS-120S need help
by Steven Weber <kd1jv@moose.ncia.net>
 - 24) [114191] Crystals Are Sold
by Ed Kessler <edkess@pa.net>
 - 25) [114192] Re: [Elmer 101] SW-20+ "Audio IC" Question..
by Tayloe Dan-P26412 <Dan.Tayloe@motorola.com>
 - 26) [114193] Re: Great Parts Source (and probes)
by "Mike Melland" <w9wis@charter.net>
 - 27) [114194] Re: New little bitty paddle (MFJ)
by "Howard Kraus" <K2UD@adelphia.net>
 - 28) [114195] Any good electronics haunts in the SF area?
by Jim Lowman <jmlowman@directvinternet.com>
 - 29) [114196] Ham Wins PRB-1 case in NY!
by Dragon Singer <WM-Scace@wiu.edu>
 - 30) [114197] My Christmas QRP wish list
by Jim <sunwatt@starband.net>
 - 31) [114198] Re: 80 osc/transmitter
by harry hurst <wa3ptg@home.com>
 - 32) [114199] Re: 80 osc/transmitter
by "Michael C. Boatright" <ko4wx@mindspring.com>
 - 33) [114200] Re: 80 osc/transmitter
by David Hinerman <wd8civ@worldnet.att.net>
 - 34) [114201] Re: CQ NV CQ NV
by "Tom" <n1tp@worldnet.att.net>
 - 35) [114202] Re: Isotron Antennas
by Steven Weber <kd1jv@moose.ncia.net>
 - 36) [114203] O.T. Nicad help...
by kaliic <kaliic@prexar.com>
 - 37) [114204] Preston power supply
by "Stuart Rohre" <rohre@arlut.utexas.edu>
 - 38) [114205] WANTED: kits and stuff
by "Brice D. Hornback" <bdh@cyberbound.net>
 - 39) [114206] Re: WANTED: kits and stuff
by "Brian" <brian@iquest.net>
 - 40) [114207] FS: Shurr PROFI-2
by bob parks <rob3ert@yahoo.com>
 - 41) [114208] Re: [QRPp-I] microwatting ??????????????
by George Gingell <k3tks@u1.abs.net>
-

Date: Fri, 07 Dec 2001 12:01:21 -0500
From: Ed Kessler <edkess@pa.net>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [114168] FS: 40 Meter Crystals
Message-ID: <5.0.2.1.0.20011207120011.00a20cb0@mail.pa.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

I have the following 40 meter crystals for sale which I don't plan to use in any QRP projects and thought that perhaps someone on the list could use them:

HC6 - 7.011, 7.061, 7.069
FT-43 - 7.042, 7.075 (CW Crystals, Marshfield, MO)

I'm 99.9% certain that these crystals are operationally in fine shape. The only crystal I haven't tested is the 7.075 unit.

I'd like to sell these as a lot.

Price is \$25.00 plus \$4.00 shipping. Reasonable offers will be considered.

73
Ed AA3SJ

Date: Fri, 7 Dec 2001 09:20:41 -0800
From: "Phinizy, William" <wphinizy@filenet.com>
To: "'qrp-1@Lehigh.EDU'" <qrp-1@Lehigh.EDU>
Subject: [114169] Coax Antenna Question
Message-ID: <C3AF5E329E21D2119C4C00805F6FF58F087412A9@hq-expo2.filenet.com>

I am thing about adding a vertical dipole to my arsenal of 20-meter antennas. You know the kind: strip back about 16 1/2 feet of shield from the center conductor of RG-58 and use the "folded over" shield as the other half of the dipole. I'll just hoist it up a tree (> 35 feet high, of course) and let 'er rip..

..any experience with this type of antenna, caveats, recommendations?

Thanks in advance..

Bill, K6WHP

Date: 7 Dec 01 10:23:13 MST
From: Rod Cerkoney <rod@n0rc.com>
To: <n4rs@netpath-rc.net>,
"Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [114170] Re: [Non-Participants Point Of View.....]
Message-ID: <20011207172313.15563.qmail@uwdvg020.cms.usa.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: quoted-printable

For more about the Fox hunt go here:

<http://www.cqc.org/fox/index.htm>

73, Rod N0RC =

Fox, Fox Hunter & Flamer of those who call on the Fox Freq. ;-)

=

"Tom Pennebaker" <n4rs@netpath-rc.net> wrote:
> Who Chooses the fox? Why isn't there a prolog of sorts, or some operati=
ng
> procedure given to the fox? I haven't participated as of yet because I=

> wasn't sure of the operating procedure of "Fox Hunting". After doing mu=
ch
> listening and reading on the newsgroup I think I have it clear. (Subjec=
t to
> change at any moment)

Date: Fri, 7 Dec 2001 09:24:39 -0800
From: "Phinizy, William" <wphinizy@filenet.com>
To: "'qrp-l@Lehigh.EDU'" <qrp-l@Lehigh.EDU>
Subject: [114171] [Elmer 101] SW-20+ "Audio IC" Question..
Message-ID: <C3AF5E329E21D2119C4C00805F6FF58F087412AA@hq-expo2.filenet.com>

This is probably jumping *way ahead* of the project, but there was a reference to a substitute for the '5532 op amp that Dave uses in his SW+ rigs that lower current consumption and (more importantly) add audio gain. My sodden old memory recollects that it was contained in the "QRP Power" NE-4040 article, but searching same has not revealed anything.

I would be most grateful if anyone could provide the facts of this mod/substitution..

..thanks.

Bill, K6WHP

Date: Fri, 7 Dec 2001 12:36:24 -0500
From: "Mike Yetsko" <myetsko@insydesw.com>
To: <wphinizy@filenet.com>,
"Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [114172] Re: Coax Antenna Question
Message-ID: <002b01c17f45\$b3afd300\$0600a8c0@charter.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I've done it for 2M (building a 2M antenna into a piece of PVC that can stand in the corner kind of thing) or 10M. 10M though was a pain to even THINK about trying to 'fold back' the shield. So I experimented with a few other 'options'.

In both other options I just cut the shield off. Well, actually I just 'tacked on' a piece of wire as the 'center'. In one case, I wrapped the coax with foil and connected that with a crimp to the shield. In another I took a piece of RG-8 and pulled the shield off and used that to 'slip over'. It was much easier to work with.

Then the other option was I just had a 1/4 wavelength exposed wire. Then went back the coax 1/4 wavelength and put a 'block'. Here I experimented with a ferrite block. In another case I experimented with winding a coil out of the coax. (This was called a 'coax cobra' in some of the OLD books.)

Anyway, I didn't see all that much difference between any of the versions of what I did. They all worked 'ok'. But to be honest, I didn't (at least on 10M) get to A/B my various schemes. I'd just make one, use it, then loose it somehow. Then find I needed an antenna real quick for a Boy Scout campout coming up and fabricate another one, another way.

The only caveat I would say would be that in any scheme where you

'coil' the coax, watch the radius. If you coil any coax too tightly, the center conductor will migrate through the dielectric and eventually short out. But long before it does that, it may give a SEVERE impedance bump that affects performance. RG-8X (and RG-8/M) seem to be the best for 'coiling'.

Mike

> I am thing about adding a vertical dipole to my arsenal of 20-meter
> antennas. You know the kind: strip back about 16 1/2 feet of shield from
the
> center conductor of RG-58 and use the "folded over" shield as the other
half
> of the dipole. I'll just hoist it up a tree (> 35 feet high, of course)
and
> let 'er rip..
>
> ..any experience with this type of antenna, caveats, recommendations?
>
> Thanks in advance..
>
> Bill, K6WHP

Date: Fri, 7 Dec 2001 09:51:25 -0800
From: "Doug Hendricks" <ki6ds@dph.dpol.net>
To: <qrp-1@Lehigh.EDU>
Subject: [114173] Re: New little bitty paddle (MFJ)
Message-ID: <017101c17f47\$ccca4c60\$4a0b0d0a@dph.dpol.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Nick, Wayne McFee, who came up with the Ft. Smith Paddle design, should feel honored that MFJ used his paddles as an inspiration for their design. When you look at the new MFJ, you definitely can see the heritage there. Also, looks like they took a couple of things from the Whiterook too!! But that is the way things work. One guy thinks of it, does it, another sees it and improves it or adapts it for his situation. Neat to see. Congratulations Wayne!! 72, Doug

Date: Fri, 7 Dec 2001 10:51:08 -0700 (MST)
From: "Paul Harden, NA5N" <na5n@rt66.com>
To: blinn <blinn@smgazette.com>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [114174] Re: [Elmer 101] Power supply (part 2)
Message-ID: <Pine.SUN.4.10.10112071002540.2814-100000@shell.rt66.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Thu, 6 Dec 2001, blinn wrote:

> "The power supply rejection ratio is in units of power,

Not quite. The RATIO is in units of VOLTAGE.

> This is one of those famous 'db voltage' vs. 'db power'
> problems.

> $10^{(-48/20)} = 0.004$ "

>

> Can someone explain the math? I know the manipulation to arrive at 0.004
> but don't understand where the value of 20 comes from in the exponent part
> of the equation?

For a VOLTAGE ratio ...

$$\text{dB} = 20 \log(V1/V2)$$

V1/V2 is the RATIO of the two voltages you are comparing. This is the voltage, or LINEAR ratio. Converting it to dB's converts this ratio into a logarithmic ratio by multiplying the log by 10 for POWER and by 20 for VOLTAGE. In your case, you know the dB part, so you need to find the "anti-log" to solve for the V1/V2 ratio. This would be 10 raised to some power.

So on the above equation:

$$10^{(\text{dB}/20)} = 10^{(-48/20)} = 10^{(-2.4)} = .004$$

The "20" is getting rid of the 20log part, leaving just $10^{(\log)}$.

> So... does this mean that on the output side of the
> regulator it is possible for the voltage to fluctuate up to 4 mV?

No. The .004 is the V1/V2 term, or the LINEAR VOLTAGE RATIO. Say your power supply has an ugly 200mV of AC ripple on it, and the voltage regulator claims to have 48dB of ripple rejection ... that is, the output will only be -48dB of the input ripple, or .004 x the input. So the output would be .004 x 250mV = 1mV.

Or, say you look at the input to the voltage regulator with your scope and see 250mV of AC ripple and 10mV on the output. The rejection, in dB, would be:

$$\text{dB} = 20\log(V_{\text{out}}/V_{\text{in}}) = 20\log(10\text{mV}/250\text{mV}) = 20\log(.04) = -28\text{dB}.$$

Or in your original example of .004

$$\text{dB} = 20\log(.004) = -47.9588$$

The steps for doing this on a hand calculator would be:

$$\text{for dB} = 20\log(10\text{mV}/250\text{mV})$$

$$10/250 = .04 \text{ [log]} = -1.3979 \times 20 = -27.9588 \text{ (-28dB for Elmer101/QRP-L!)}$$

or for Bill's original example of $10^{(\text{dB}/20)}$ for -48dB:

$$-48/20 = -2.4 \text{ [10^x KEY]} = .0039811 = (.004 \text{ OK for Elmer101/QRP-L!})$$

Remember, to convert linear ratios to dB's, it's

10log(ratio) for POWER

20log(ratio) for VOLTAGE

> Thanks - Bill WA7TQK

Good question, Bill, and a good opportunity for a nice review ... at least for those who don't have their ARRL handbook stuck in their back pocket everytime they read qrp-l :-)

72, Paul NA5N

On a scale of 1 to 10, I feel like a dang 3 today.
Therefore, I'm running about 5dB below my normal power.

$$10\log(3/10) = -5.2\text{dB}$$

Date: Fri, 7 Dec 2001 09:57:41 -0800
From: "Doug Hendricks" <ki6ds@dph.dpol.net>
To: <qrp-l@Lehigh.EDU>
Subject: [114175] Re: 80 osc/transmitter
Message-ID: <017501c17f48\$ae41b840\$4a0b0d0a@dph.dpol.net>
MIME-Version: 1.0
Content-Type: text/plain;

charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Guys, I had the pleasure of meeting Shawn and his lovely girlfriend at the NE QRP Meeting in August at the ARRL. Shawn, she definitely is a keeper and is very easy on the eyes, grin. You might think about scaling the TT2 circuit to 80 meters, or look up the Oner by George Burt in Sprat. The NOGA80 is also a very good suggestion. Say hi to your girlfriend for me. I also would say to the group that if your wife or significant other even tolerates ham radio they are keepers. Some guys like Paul Harden, Bob Kellogg, Lowell Corbin and Dick Palmer get really lucky, and get wives that are active QRPers.

72, Doug

Date: Fri, 7 Dec 2001 13:11:16 -0800
From: "Glen Leinweber" <leinwebe@mcmail.cis.mcmaster.ca>
To: <wphinizy@filenet.com>
Cc: "qrp-1" <qrp-1@lehigh.edu>
Subject: [114176] Re: [Elmer 101] SW-20+ "Audio IC" Question..
Message-ID: <002c01c17f63\$b78f5b80\$07ea7182@mcmaster.ca>
MIME-Version: 1.0
Content-Type: text/plain;
charset="Windows-1252"
Content-Transfer-Encoding: 7bit

Bill,

I think it was the LMC662.

Let's push your question to a more general one: How do you choose substitutes for op amps?

Very many dual op-amps would work OK in this circuit. You've mentioned one spec that might be important - power consumption. Most op amps draw a fairly fixed DC current from the supply. The LMC660 draws about 0.75 ma total, when not driving a load. The NE5532 might draw 8 ma.

These days, you must also ensure that op-amps can handle the supply voltage. For this radio, supply voltage that the op-amp sees is 12v. Some new op amps are made to take a 5v or even 3v supply. But most older types will handle 12v easily. The LMC662 can deal with supply voltages up to 15v.

Since we're driving a fairly low impedance load, the op-amps ability to supply output current is of concern. The NE5532 has internal current limiters that keep current below 38mA (drawn from the output pin). The LMC662 limits current to about 25mA.

In this audio application, frequency response isn't all that important,

since most op-amps have good gain below 1Khz. The NE5532 runs out of gain at about 10MHz. The LMC662 doesn't go as high, but still has sufficient gain at 1KHz to work well.

Noise might be a concern, since input signals are pretty small. The NE5532 is very good, having a noise spec of 5nv/rt(Hz) @ 1KHz. The LMC662 isn't quite as good, with voltage noise of 22nv/rt(Hz), but it has extremely low current noise.

The DC offset specs are of no concern at all, since we're listening to audio, and everything is AC-coupled.

If DC current drain isn't a concern, looks like the NE5532 is a bit better choice.

----- Original Message -----

From: "Phinizy, William" <wphinizy@filenet.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Sent: Friday, December 07, 2001 9:24 AM
Subject: [Elmer 101] SW-20+ "Audio IC" Question..

> This is probably jumping *way ahead* of the project, but there was a
> reference to a substitute for the '5532 op amp that Dave uses in his SW+
> rigs that lower current consumption and (more importantly) add audio gain.
> My sodden old memory recollects that it was contained in the "QRP Power"
> NE-4040 article, but searching same has not revealed anything.

Date: Fri, 7 Dec 2001 13:11:08 -0500
From: W2AGN <w2agn@pobox.com>
To: qrp-l@lehigh.edu
Subject: [114177] Isotron Antennas
Message-ID: <0112071311080D.02224@njbirdman>
Content-Type: text/plain;
 charset="iso-8859-1"
MIME-Version: 1.0
Content-Transfer-Encoding: 8bit

Since we are having all this unseasonable weeather, I decided to play antennas. I had, on a whim, bought a 40M and a 20M Isotron some time ago. I had heard varying reports, from "Miraculous..as good as a 3 ele beam," to "radiates about the same as a good dummy load."

Well, I put them together, tuned up easily enough, put them up about 35' and...

Ta Daaa!

I side with the Dummy Load group. On 40M, heard a very weak signal. Switched to dipole...and it was pinning the S meter! On 20, haven't heard a signal yet, although plenty even in the mobile on a whip.

If you want to be REALLY minimalist, this is the way to go. Kind of like fishing with no bait.

--

John L Sielke W2AGN
w2agn@pobox.com
http://www.qsl.net/w2agn

Date: Fri, 7 Dec 2001 13:26:26 -0500
From: "w8diz" <w8diz@fpqrp.com>
To: <wphinizy@filenet.com>,
 "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [114178] Re: Coax Antenna Question
Message-ID: <003201c17f4c\$aef469a0\$21dd1b41@cinci.rr.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="Windows-1252"
Content-Transfer-Encoding: 7bit

Bill,

I find that this antenna works very well. Only thing I had to do was to place a coax choke at the feedpoint of the antenna. This can be either a large 2.5 inch type 43 toroid with 8 or more turns or a 6 inch coil of maybe 10 turns of the coax cable.

My "actual" version of this antenna was using the 10 meter German fiberglass mast. I inserted the antenna on the inside of the mast and just lean it against a tree.

-Diz, W8DIZ

----- Original Message -----

From: "Phinizy, William" <wphinizy@filenet.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Sent: Friday, December 07, 2001 12:20 PM
Subject: Coax Antenna Question

I am thing about adding a vertical dipole to my arsenal of 20-meter antennas. You know the kind: strip back about 16 1/2 feet of shield from the center conductor of RG-58 and use the "folded over" shield as the other half of the dipole. I'll just hoist it up a tree (> 35 feet high, of course) and let 'er rip..

..any experience with this type of antenna, caveats, recommendations?

Thanks in advance..

Bill, K6WHP

Date: Fri, 7 Dec 2001 13:33:25 -0500
From: "w8diz" <w8diz@fpqrp.com>
To: <wphinizy@filenet.com>,
 "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [114179] Re: [Elmer 101] SW-20+ "Audio IC" Question..
Message-ID: <003d01c17f4d\$a8ed5520\$21dd1b41@cinci.rr.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="Windows-1252"
Content-Transfer-Encoding: 7bit

Bill,

You might try the LMC662CN.

-Diz, W8diz
<http://kitsandparts.com>

----- Original Message -----
From: "Phinizy, William" <wphinizy@filenet.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Sent: Friday, December 07, 2001 12:24 PM
Subject: [Elmer 101] SW-20+ "Audio IC" Question..

This is probably jumping *way ahead* of the project, but there was a reference to a substitute for the '5532 op amp that Dave uses in his SW+ rigs that lower current consumption and (more importantly) add audio gain. My sodden old memory recollects that it was contained in the "QRP Power" NE-4040 article, but searching same has not revealed anything.

I would be most grateful if anyone could provide the facts of this mod/substitution..

..thanks.

Bill, K6WHP

Date: Fri, 07 Dec 2001 13:31:09 -0500
From: <n7dma@mindspring.com>
To: qrp-1@lehigh.edu
Subject: [114180] Re: Isotron Antennas
Message-ID: <Springmail.105.1007749869.0.67043000@www.springmail.com>

Perhaps my observations are a little one-sided on the Isotron Antennas. I have an ISO-20 up 15 feet, and have enjoyed decent success with it: my K1 @ 5 Watts got an RST 559 from KH6B in the Spartan Sprint the other night using it, and heard a UA1 calling CQ, and the reply from a ZS6 while using it for the initial alignment of my K1, both roughly RST 569.

To be fair, the only other antenna I have is a 40' random wire under the eaves of the house (8' high) for comparison, so maybe I am missing something. No doubt a dipole or Yagi at a respectable height would be better, but the Isotron works OK for me!

Karl
N7DMA

Date: Fri, 07 Dec 2001 12:38:19 -0600
From: Dave Sjolin <sjolin@swbell.net>
To: w2agn@pobox.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [114181] Re: Isotron Antennas
Message-ID: <3C110C9B.4F57B6C7@swbell.net>
MIME-version: 1.0
Content-type: text/plain; charset=us-ascii
Content-transfer-encoding: 7BIT

W2AGN wrote:

> I side with the Dummy Load group. On 40M, heard a very weak signal. Switched

> to dipole...and it was pinning the S meter! On 20, haven't heard a signal
> yet, although plenty even in the mobile on a whip.

John, i'm suprised with your results. Did you consider that maybe there is something wrong with that particular antenna. The original owner also had problems with it if I remember correctly. Perhaps its not a design error but there is a bad connection or assembly.

ARRL had a much different opinion of it if I remember correctly a few years ago when they reviewed it along with a few other antennas. I would expect the 40 meter antenna to perform about the same as your aveage mobile whip.

If I can find some coax, I might put my 40 meter Isotron outside and see what I can hear. I do remember working tons of stations with the antenna in my basement, underground.

73 de Dave, N0IT

Date: Fri, 7 Dec 2001 13:36:31 -0500
From: Bill Coleman <aa4lr@arrl.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [114182] Re: RF Probe Measures Effiececy
Message-ID: <1011107133631.NAA00713@gate.iterated.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"

On 12/1/01 8:24 AM, John R Kirby at n3aaz-qrp@juno.com wrote:

>A relative measuring device samples RF energy
>at the input of a reactive component (test point >A<) and
>then again at the output of that same component
>(test point >B<) and then with a little arithmetic, you
>calculate the throughput efficiency (or loss) of that component.

An RF probe measures RF VOLTAGE.

You can't use the VOLTAGE as a measure of RF power unless you know the IMPEDANCE. (eg $P = V^2/R$)

Since the output of a tuner may have a wildy different impedance than the input, you can't use relative RF voltage measurements to tell anything by themselves.

Bill Coleman, AA4LR, PP-ASEL Mail: aa4lr@arrl.net
Quote: "Not within a thousand years will man ever fly!"
 -- Wilbur Wright, 1901

Date: Fri, 7 Dec 2001 13:37:15 -0800
From: "Dave Benson" <nn1g@earthlink.net>
To: <qrp-l@lehigh.edu>
Cc: <cjl@mitre.org>, <sslyon@megalink.net>
Subject: [114183] "It's beginning to look a lot like.. Noise Bridges!"
Message-ID: <000601c17f67\$57ea0c80\$7851d03f@pavilion>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

gang-

Parts for the New England QRP club's Noise Bridge kit are now on order and should be here soon. If you'd like one of these handy little puppies, orders go to:

Seabury Lyon, AA1MY
99 Sparrowhawk Mtn Rd
Bethel, ME 04217

Include a personal check or money order for \$15 US, made out to 'Seabury Lyon' (not NE QRP or any similar variant) Shipping is included in this price and will be by First Class US mail (US and possessions). If you'd prefer, Seab can also accept Paypal transfers- those go to

sslyon@megalink.net

The instructions are currently in work and should appear on the New England QRP website within the next several days. If you'd like a sneak peak, the schematic and pictorial drawings are now at

<http://smallwonderlabs.com/NB.pdf>

The full-up information will migrate to the NE site and the site's webmaster should be announcing that change when it happens.

73- Dave Benson, K1SWL

Date: Fri, 07 Dec 2001 18:47:56
From: "Brad Hernlem" <alihernlem@hotmail.com>
To: w9wis@charter.net
Cc: qrp-1@lehigh.edu
Subject: [114184] Re: Great Parts Source (and probes)
Message-ID: <F129EmYDKFJ2I13pL3200009bcc@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

Mike Melland (w9wis@charter.net)

....
>Great place.... lots of obsolete and surplus electronics,
>test equipment (including Tek and HP parts!) and imho good
>prices. I just purchased 2 ea Tektronix P6131 complete new
...

Speaking of Tektronix probes, do you or anyone on the list have any info on a probe marked P6501?

I've got some kind of sensor box that I acquired which has one of these (possibly the guts of a probe) mounted onto a board. It says 1M and 1.8 pF impedance on it and has two sets of leads running out the back end for power and for signal out, I presume. I imagine that this is some kind of high speed active probe and would appreciate any details that would help me put it to use.

Brad

Get your FREE download of MSN Explorer at <http://explorer.msn.com/intl.asp>

Date: Fri, 7 Dec 2001 13:54:00 -0500 (EST)
From: Stephan Greene <sgreene@patriot.net>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [114185] Re: speaking of publishing articles...
Message-ID: <Pine.LNX.4.10.10112071345250.5770-100000@tzion.greene.lan>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Fri, 7 Dec 2001, David Hinerman wrote:

> <http://www.embedded.com/story//0EG20011129S0057>
>
> It gives an inside look at a project at Stanford and Santa Clara University
> to build cheap (as compared to most) satellites. It's heavy on computers
> and light on radio, but it DOES invite hams with VHF and packet radio
> capabilities to participate in the program.

The article does not name him, but I believe Professor Bob Twiggs at Stanford is the person who started this effort. Bob was previously a professor at Weber State Univ in Utah and has had a hand in many amateur and research microsatellite projects, including the AMSAT Microsat design.

There have been several university-student led satellite efforts at various universities overseas, as well as at Univ Huntsville (SEDSAT) and US Naval Academy (PCSAT). More info on amateur satellites @ <http://www.amsat.org>

OBQRP: The satellite transmitters are usually QRP - A0-27 is typically running under a watt, for example. Uplinks can often be low power as well, relying on antenna gain for the necessary EIRP.

73, Steve KA1LM

Stephan A. Greene sgreene@patriot.net ka1lm@amsat.org
Herndon, VA 1-703-654-6032 office 1-571-233-1194 cell

Date: Fri, 7 Dec 2001 14:07:12 -0500
From: thomasr2@gdls.com
To: n5nw@onebox.com
Cc: qrp-1@lehigh.edu
Subject: [114186] Re: DCTL woes (now N4RT Windom)
Message-ID: <0F9240A623.89727B42-0N85256B1B.0060A932@gdls.com>
MIME-Version: 1.0
Content-type: text/plain; charset=us-ascii

Hi Marty,

Well I really didn't have a decent way to check my 40 meter DCTL for resonance, in all fairness. I was very careful to cut the antenna

precisely by the formulas given, but that always needs tweaking a bit in practice. I have since ordered an antenna analyzer, so when that arrives, I intend to put it on the DCTL and check it out. The DCTL did work, but not as well as I'd hoped. I know it is resonant somewhere near the bottom end of 40 meters, unless the formulas are really bogus.

I like the DCTL size since its really easy to string up practically anywhere. On the other hand, I thought that maybe it would be nice to come up with an antenna that is closer to a half-wave in length that would be "happy" close to the ground. This should also make the antenna easy to put up for a temporary operation, and it should perform better than the 1/8 wave DCTL. So, what I describe below is the solution that I came up with.

The "folded windom" is basically nothing more than a folded dipole made from 300 ohm twin lead. But, instead of feeding it in the center, like most folded dipoles (because that is the 300 ohm impedance point), I feed this one ten feet from one end. This turns out to be a high impedance point on the antenna, but like most windoms I've constructed, it seems to work well. The reason I chose this point is that as you get closer to the ground, the radiation resistance of a centerfed dipole decreases. So, I figured that if I chose a typically "high" impedance point to feed the antenna to begin with, when it is low to the ground (mine is about five feet off the ground), the feedpoint impedance might be better (higher) than if I fed it at the center. Obviously, it would be ideal if the feed point impedance were 300 ohms to match the characteristic impedance of the feedline. This is why I'm investing in an antenna analyzer... I want to measure this lash up and see how closely it fits the theoretical, if at all.

I strung the antenna through the limbs of trees I could reach in the backyard and loaded it up. Made a contact on the first try! I called for hours on the DCTL with no luck. I've since made several contacts on this antenna with reasonably good reports... much better success than I had with the DCTL.

This antenna is not configured as a loop or anything of the sort... it is simply snaked through the trees behind the house resting on nearby tree limbs. I'm sure it could probably be adapted to other configurations without much noticeable change in performance... I just haven't tried any other configurations yet.

Here's a crude illustration of what I have:

```
<----- 57' 3"
----->
{
.....
.....
```

```

} <----- ends are shorted
  <-----10'----->\  /
                        |  |
                        |  |      Dimensions shown are for
40 meters (7.025 MHz)  |  |
                        |  |
                        |  |
                    To Tuner
                        (any length)

```

One could also install a 6:1 balun in the feedline and run 50 ohm coax into the shack... or another variation would be to use a common TV balun and run 75 ohm coax into the shack (QRP only , as the TV balun won't take much power). If you did this, you wouldn't need a tuner at all. Even with coax feed, you could still use a tuner if you wanted to, and it remains to be seen how well this configuration will work on other bands. I'll give this a try soon.

The length was calculated using the typical dipole formula $468/f \text{ (MHz)} \times 0.86$ where the 0.86 is the assumed velocity factor of the 300 ohm twinlead. >From what information I can find, TV twinlead can have a velocity factor which varies anywhere from 0.75 to 0.95! So, I just picked a number in between those extremes. The velocity factor will depend on the dielectric, but should fall somewhere in this range. There are many different types of TV twinlead from many different manufacturers out there, so one will have to "punt" on this to some extent. Again, an antenna analyzer will be a big help in determining this exactly.

The feedpoint was determined by taking the overall length of the antenna and dividing by two (this gives you the centerpoint). Using a windom rule of thumb, one would locate the 300~450 ohm impedance point at approximately 65% of this length (from the center) or 35% of this length (from the end). Of course, this rule of thumb applies to single wire antennas fed with 300 or 450 ohm line and at least a quarter wavelength above ground. So, what the feedpoint impedance actually is in my configuration, at five feet above ground, is anybody's guess (even one more reason I need the antenna analyzer, HI).

I suppose if no other moniker fits this antenna, I could call it the "N4RT windom." I have never seen one assembled like this one, but it made sense to me that it might work OK. So far, I've been pleased with the results. As usual, your mileage may vary. I'll report more on the details as soon as I get a chance to put an antenna analyzer on it.

Obviously, if you're not going to operate this antenna low to the ground (I'd say fifteen feet off the ground, or less) then you would probably get a much better match to the feedline by center feeding the dipole. I'd be

interested in the opinions of others who are inclined to try this antenna close to the ground.

73,

Ron N4RT

Date: Fri, 7 Dec 2001 14:11:40 -0800
From: "Glen Leinweber" <leinwebe@mcmail.cis.mcmaster.ca>
To: "qrp-l" <qrp-l@lehigh.edu>
Subject: [114187] Re: [Elmer 101] SW-20+ "Audio IC" Question..
Message-ID: <001101c17f6c\$25c138a0\$07ea7182@mcmaster.ca>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="Windows-1252"
Content-Transfer-Encoding: 7bit

Dave informs me that the LMC662 can give trouble when substituted for the NE5532. Not always, but it appears to be marginally stable. Instability raises a thorny issue. Both LMC662 and NE5532 are internally compensated so that they shouldn't oscillate in any circuit that's meant to be an amplifier.

But then the LMC662 was only spec'd with a load as low as 600 ohms. The SW series can see a lower load impedance, depending on what headphones you hook up. So looks like I missed an important thing to look for when substituting op-amps: will it be stable? It'd likely be tough to set up a SPICE circuit that'd answer the stability question with some assurance. Sometimes you've just gotta try it and see - something hams do a lot!
-Glen

Date: Fri, 7 Dec 2001 14:27:00 -0500
From: W2AGN <w2agn@pobox.com>
To: Dave Sjolín <sjolín@swbell.net>, w2agn@pobox.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [114188] Re: Isotron Antennas
Message-ID: <0112071427000E.02224@njbirdman>
Content-Type: text/plain;

charset="iso-8859-1"
MIME-Version: 1.0
Content-Transfer-Encoding: 8bit

On Friday 07 December 2001 13:38, Dave Sjolín wrote:

> W2AGN wrote:
> > I side with the Dummy Load group. On 40M, heard a very weak signal.
> > Switched to dipole...and it was pinning the S meter! On 20, haven't heard
> > a signal yet, although plenty even in the mobile on a whip.
>
> John, i'm supriSED with your results. Did you consider that maybe there
> is something wrong with that particular antenna. The original owner also
> had problems with it if I remember correctly. Perhaps its not a design
> error but there is a bad connection or assembly.

--

Interesting! Well, I both these new from the manufacturer. SWR seems to tune as advertised. I was able to get 1.5:1 at 14.060, and about 2.0:1 on the 40M antenna. I'll play around some more and see.

John L Sielke W2AGN
w2agn@pobox.com
<http://www.qsl.net/w2agn>

Date: Fri, 7 Dec 2001 11:51:18 -0800
From: "Phinizy, William" <wphinizy@filenet.com>
To: "'qrp-l@Lehigh.EDU'" <qrp-l@Lehigh.EDU>
Subject: [114189] [Elmer 101] SW-20+ "Audio IC" Question..
Message-ID: <C3AF5E329E21D2119C4C00805F6FF58F087412AE@hq-expo2.filenet.com>

Many thanks to all who responded -- including Dave who basically said there's a reason the 5532 was chosen. I have a few TL084s lying around so I might try them just to see the difference. However, I think that after receiving this advice, I'll attempt to bump the audio on the SW+ by using the old trick of connecting a pair of stereo phones in series..

..appreciate the input!

Bill, K6WHP

Date: Fri, 07 Dec 2001 12:23:35 -0500
From: Steven Weber <kd1jv@moose.ncia.net>

To: w2kj@earthlink.net
Cc: qrp-1@lehigh.edu
Subject: [114190] Re: TS-120S need help
Message-ID: <3.0.6.32.20011207122335.00795990@mailhost.ncia.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

>In the USB position when the mike is keyed (and radio is
>keyed) speaking into the mike produces a full 100w key-down
>situation you would expect in the CW mode.

By this I take it to mean as soon as you start to talk, the output jumps to 100 watts and stays there untill you release the PTT? And, do you have the same problem in LSB?

I agree with Mike in thinking it's an oscillation or feedback problem. One test that could be informative is to key the transmitter in CW mode and vary the power out with the carrier level control. Start at min power and slowly increase it. If the power out does not vary smoothly, ie, at some point it suddenly jumps to 100 watts, than you probably have an oscillation or feed back problem in the power amp.

If you only have the problem using the mic, RF might be getting back into the mic. That would be a lot easier to fix than a PA problem! The PA module is something of a pain to get into, but it could be worth making sure all the mounting screws on the PA board are good and tight and possibly on the LPF board as well, which is even harder to get at. Good luck, that problem could be a real head scratcher!

72,
Steve, KD1JV
"Melt Solder"
White Mountians of New Hampshire
<http://www.qsl.net/kd1jv/>

Date: Fri, 07 Dec 2001 14:56:21 -0500
From: Ed Kessler <edkess@pa.net>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [114191] Crystals Are Sold
Message-ID: <5.0.2.1.0.20011207145542.00a23af0@mail.pa.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

Crystals sold quickly.

Tnx for your inquiries.

73

Ed AA3SJ

Date: Fri, 7 Dec 2001 13:26:52 -0700
From: Tayloe Dan-P26412 <Dan.Tayloe@motorola.com>
To: "'wphinizy@filenet.com'" <wphinizy@filenet.com>
Cc: "QRPL (E-mail)" <qrp-1@lehigh.edu>
Subject: [114192] Re: [Elmer 101] SW-20+ "Audio IC" Question..
Message-ID: <1D74B9231259D511B1AA0002B32C2896150CAE@az10exm06.sat.mot.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"

>This is probably jumping *way ahead* of the project, but there was a
>reference to a substitute for the '5532 op amp that Dave uses in his SW+
>rigs that lower current consumption and (more importantly) add audio gain.
>My sodden old memory recollects that it was contained in the "QRP Power"
>NE-4040 article, but searching same has not revealed anything.

Bill:

New audio type ICs are coming out all the time! However, most are targeted
at a lower voltage than 12v.

If you are after lower current consumption, the TS922 would be a good choice.

On the plus side, it is specified to drive a 32 ohm load, so it is kind of
targeted
towards being a headphone drive, and it consumes only 2 ma between the two
op-amps on the chip. Same pinout as the 5532.

One the minus side:

1) This part has a noise level of 9 nV/SqrtHz compared to the 4 to 5 nV/SqrtHz of
the 5532. Between the two op-amps in the package, the SW+ is getting a
voltage gain of 2500x (50x each stage) or about 70 db of gain. I would guess that
you could expect the background "hiss" out of this device to be about 6 worse than
the 5532.

2) The part has 4 MHz of gain bandwidth vs. the '5532 10 MHz. If the upper audio
limit is 1 KHz and the op is running at 50x gain, that leaves 200x (46 db) of
excess
gain for feedback to reduce distortion for the '5532. That is 80x (38 db) for the

TS922.

The TS922 is not as good as the '5532, but should still be ok.

3) the TS922 runs 12v maximum. This means that you should run it off the regulated 8v voltage regulator instead of the normal 12v supply.

I don't think this is a big tradeoff. A little more background hiss to save 6 ma of current.

The TS922 (TS922AIN or TS922IN) is available from Mouser for \$1.18.

- Dan Tayloe; Phoenix, Az; Az ScQRPions

Date: Fri, 07 Dec 2001 15:49:53 -0500
From: "Mike Melland" <w9wis@charter.net>
To: "Brad Hernlem" <alihernlem@hotmail.com>, w9wis@charter.net
Cc: qrp-1@lehigh.edu
Subject: [114193] Re: Great Parts Source (and probes)
Message-ID: <web-1470857@dc-mxdb02.cluster1.charter.net>
MIME-Version: 1.0
Content-Type: text/plain; charset="ISO-8859-1"
Content-Transfer-Encoding: 8bit

On Fri, 07 Dec 2001 18:47:56

> Speaking of Tektronix probes, do you or anyone on the
> list have any info on
> a probe marked P6501?

The P6501 was made from about 1988 to 1992 or so... It is a fixture probe. Tektronix called them a "micro probe". The specs should be, 750MHz band width, 10X attenuation, 1M Ohm input, 1.8 pF Input C and a +/- 10V dynamic range. They were used during the manufacture of IC chips.... to probe the wafers before the case and pins were added.

Mike, W9WIS

Date: Fri, 7 Dec 2001 15:54:01 -0500
From: "Howard Kraus" <K2UD@adelphia.net>
To: <nkennedy@tcainternet.com>
Cc: <qrp-1@Lehigh.EDU>

Subject: [114194] Re: New little bitty paddle (MFJ)
Message-ID: <001d01c17f61\$4c7b7880\$07633018@buf.adelphia.net>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Seems like a clone of the Whiterook paddle. The Whiterook allows room inside for a keyer if you wish, they also sell a "keyer inside" paddle.

72

Howard Kraus, K2UD
----- Original Message -----
From: "Nick Kennedy" <nkennedy@tcainternet.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Sent: Friday, December 07, 2001 9:10 AM
Subject: New little bitty paddle (MFJ)

> Anybody else been checking MFJ's site for that little \$20 paddle they've
> listed with the teaser "Photo Later" for months?
>
> They finally posted the photo, although it's not a very good picture. It
> looks like the thing uses rubber feet glued to the arms to engage your
> fingers and has a big ole quarter-twenty nut for ... something. Not good
> at mechanical descriptions. But I guess the key (pun unintended) is how
it
> feels. Anybody tried it yet? Is it a version of something we've already
> seen? I do like the price.
>
> I think they're claiming the whole thing will fit into an Altoids box.
>
> 72--Nick, WA5BDU
>
> dit dit

Date: Fri, 07 Dec 2001 12:54:43 -0800
From: Jim Lowman <jmlowman@directvinternet.com>
To: qrp-l@lehigh.edu
Subject: [114195] Any good electronics haunts in the SF area?
Message-ID: <3C112C93.5211B85B@directvinternet.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Gang, I will be in the San Francisco area (Moscone Center) from the 9th through the 14th of December.

Any interesting electronics haunts in the general area? I will have a vehicle, and my wife will be attending a conference M-F during the day, so it will be a vacation for me.

Thanks and 72 de Jim - AD6CW

Date: Fri, 07 Dec 2001 20:59:39 +0000
From: Dragon Singer <WM-Scace@wiu.edu>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [114196] Ham Wins PRB-1 case in NY!
Message-ID: <5.1.0.14.0.20011207205908.00aba330@pop3.wiu.edu>
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"; format=flowed
Content-Transfer-Encoding: quoted-printable

Hi gang,

Wayne K9DI es Sequoia here. The following is from www.arrl.org it's an article about a ham in New York who won a PRB-1 case.

New York Ham Wins Antenna Lawsuit

NEWINGTON, CT, Dec 6, 2001--In one of the most favorable PRB-1 court rulings in years, a New York amateur has won a three-year battle to erect a tower on his property. The US District Court for the Northern District of New York has ordered the Saratoga Springs Planning Board to grant Randall J. Palmer, N2NVH, a special use permit for a 44-foot antenna support structure. PRB-1 is the limited federal pre-emption that requires localities to reasonably accommodate Amateur Radio communication.

In a 20-page decision issued December 3, US District Judge Norman A. Mordue found that "the planning board did not attempt to negotiate a satisfactory compromise with

Palmer and, thus, failed to reasonably accommodate his amateur communication needs pursuant to PRB-1." Mordue found that "the planning board engaged Palmer in a strictly one-sided negotiation consisting of inflexible demands and the construction of hoop after hoop for Palmer to jump through." Palmer, the judge asserted, complied with many of the planning boards numerous requests and even made concessions on his own initiative.

ARRL Volunteer Counsel Albert J. Millus, WB2EQR, represented Palmer through much of the battle, first writing the planning board on Palmer's behalf in the spring of 1999. "I'm a ham radio operator myself, and these are important cases for hams," Millus told the Associated Press December 4.

Section 24-12.15 of the Saratoga Springs Zoning Ordinance limits all antennas to 20 feet in height. It allows exceptions only upon issuance of a special use permit. In January 1999, Palmer applied for one to install a 41-foot crank-up tower with two antennas and a mast--for an overall height of 47 feet. After three hearings, the planning board unanimously denied Palmer's application in June 1999.

Palmer filed his lawsuit, claiming that the denial contravened PRB-1. During pretrial proceedings before a US magistrate, the town agreed to reconsider Palmer's application if he submitted additional information. The planning board wanted Palmer to submit four separate proposals for the placement of his structure, pay staff fees to review the new material, identify potential RF interference (RFI) problems, provide information on the effect on property values, and present proof of liability insurance.

In response, Palmer and Millus noted that federal law preempts municipalities from denying a permit for a radio installation based on RFI and asked for a statement of costs due, but complied with all other requests. On his own initiative, Palmer agreed to retract the tower when not in use, install a fence and plant four trees around it to minimize visual impact, and buy a new antenna to replace his previous two, reducing the height to 44 feet.

Two additional hearings followed. During one of them, the planning board asked Palmer to also restrict his radio operation to nighttime hours, but Palmer declined. Last February 7, the planning board voted 5-2 to once

again deny Palmer's permit. It also issued a lengthy rationale that cited=20
11 reasons for the denial.

Palmer proceeded with the lawsuit, and a bench trial was held=20
October 30. Mordue's decision relied on an analysis of antenna cases=20
established in the landmark 1991 Ninth Circuit decision in Howard v. City=20
of Burlingame, and reaffirmed by the Eighth Circuit in 1994 in Pentel v.=20
Mendota Heights.

Howard requires that in applying a zoning ordinance to an Amateur=
=20
Radio application, a municipality must consider the application, make=20
factual findings, and attempt to negotiate a satisfactory compromise with=20
the applicant.

Mordue found the record "clearly proves" the planning board made=20
no attempt to negotiate a satisfactory compromise.

"Palmer submitted undisputed and voluminous materials to the=
planning
board demonstrating that a 47-foot antenna was the minimum height needed=20
for effective communication," Mordue stated. "The few planning board=20
requests that Palmer refused to agree to were unreasonable on their face,"=
=20
Mordue said the planning board's written decision "underscores its=20
inflexibility."

Overruled zoning actions in antenna cases typically are remanded=20
to the local board for reconsideration, but Mordue said that since the=20
planning board already knew what it was supposed to do under PRB-1, "such=20
action would likely be futile," he said, directing the planning board to=20
grant Palmer's application.

It is not yet known whether Mordue's decision will be published in=
=20
the Federal Supplement, a collection of US District Court decisions=20
distributed to law libraries throughout the country. Publication greatly=20
increases a decision's value as persuasive precedent in other jurisdictions.

ARRL Hudson Division Director Frank Fallon, N2FF, continues to=20
spearhead a legislative effort to codify PRB-1 as a New York statute.=20

Fallon said this that the New York Assembly should provide a statutory=20
PRB-1 directive to its municipalities to minimize the likelihood that other=
=20
cities will follow the path of Saratoga Springs. He said he hoped the=20
decision in the Palmer
case--coupled with the goodwill generated by amateur response to the=20
September 11 World Trade Center attacks--will prompt the New York Assembly=
=20
to act favorably on the PRB-1 bill when it goes back into session December=
17.

Page last modified: 11:21 AM, 06 Dec 2001 ET

Page author: awextra@arrl.org

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Respectfully and Sincerely Yours,

Wayne M. Scace

k9di@arrl.net

LICQ# 315313

FISTS# 4409

QRP-L# 2313

FPQRP-L# 217

SOC# 452

ARS # 1,082

Zombie # 800

Date: Fri, 07 Dec 2001 15:13:49 -0600
From: Jim <sunwatt@starband.net>
To: QRP-L <qrp-L@Lehigh.edu>
Subject: [114197] My Christmas QRP wish list
Message-ID: <3C11310D.F3DD658@starband.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

A real interesting project would be a modification that would allow much
lower measurements on the Oak Hills QRP wattmeter, WM-1, & WM-2.

Perhaps so that 100mW was changed to 1mW.

I would add to my "wish list" a way to calibrate the WM-1, & WM-2
without an oscilloscope.

Best wishes to everyone, and see you in the Holidays Milliwatt Contest.

Jim KJ5TF

"All Milliwatts, All The Time"

Date: 07 Dec 2001 16:38:30 -0500
From: harry hurst <wa3ptg@home.com>
To: WD8CIV@worldnet.att.net
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [114198] Re: 80 osc/transmitter
Message-ID: <1007761125.24361.1.camel@wil-support1>
Content-Type: text/plain
Content-Transfer-Encoding: 7bit
Mime-Version: 1.0

> I wasn't able to tell what final transistor it uses, but my uneducated
> guess is that it's a 2N3053 or similar. (Somebody correct me if I'm wrong,
> please!) The oscillator is a 2N2222, and the keying transistor looks like
> it says 2N4036.

The 2N3053 is available at Radio Shack. Don't know about the 2N4036.

Date: Fri, 07 Dec 2001 16:42:47 -0500
From: "Michael C. Boatright" <ko4wx@mindspring.com>
To: qrp-l@lehigh.edu
Subject: [114199] Re: 80 osc/transmitter
Message-ID: <5.0.2.1.2.20011207164151.022a7040@pop.mindspring.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

The NOGA 80 (also called the "GA Cracker") can also be found in the new NOGA Compendium...along with the NOGAnaut transmitter and the associated power amplifier.

72 de Mike, K04WX
Michael C. Boatright

Date: Fri, 07 Dec 2001 16:42:47 -0500
From: David Hinerman <wd8civ@worldnet.att.net>
To: qrp-1@lehigh.edu
Subject: [114200] Re: 80 osc/transmitter
Message-ID: <3.0.6.32.20011207164247.00799e60@postoffice.worldnet.att.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

At 09:57 AM 12/7/01 -0800, you wrote:
>also would say to the group that if your wife or significant other even
>tolerates ham radio they are keepers.

Doug,

I'll second the notion. My wife never had much interest, but went to the trouble of getting a license just because I'm into radio. (I think she likes using it to keep tabs on me, too, but I don't consider that a problem.)

Dave

Dave Hinerman
WD8CIV@worldnet.att.net

Date: Fri, 7 Dec 2001 16:56:50 -0500
From: "Tom" <n1tp@worldnet.att.net>
To: <ko4wx@mindspring.com>,
 "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [114201] Re: CQ NV CQ NV
Message-ID: <005401c17f6a\$136dabe0\$f68d4d0c@tom>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

3 Nevada hounds have bagged a pelt.

WX7M, KA7CGI, and KU7Y.

There is nothing tacky about making a sked for WAS.

Tom, N1TP
Naples, Florida

----- Original Message -----

From: "Michael C. Boatright" <ko4wx@mindspring.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Sent: Friday, December 07, 2001 8:15 AM
Subject: CQ NV CQ NV

> This is a tacky way to do it, but I'm trying to make a sked with someone
in
> Nevada to complete my 2001 QRP WAS. I'm sitting at 49 worked, 49
> confirmed, but am having a devil of a time finding NV. Would prefer to
> work a QRP'er, CW. Any NV lurkers on the list who could make a sked with
> me over the next few days?
>
> 72 de Mike, K04WX
> Michael C. Boatright
>

Date: Fri, 07 Dec 2001 17:03:15 -0500
From: Steven Weber <kd1jv@moose.ncia.net>
To: qrp-l@lehigh.edu
Subject: [114202] Re: Isotron Antennas
Message-ID: <3.0.6.32.20011207170315.007aa260@mailhost.ncia.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Since I still have my 160M Isotron up in the backyard, and since the
PC-9000 does 160, and I believe someone said the ARRL 160M contest is this
weekend, maybe I'll give it try and see how far out of my backyard this
thing can go with 40 watts. I can certainly hear signals with it and got a
S2 with 5 watts out of it from Seab, some 25 miles away last week, so I
know it does sorta work...(Seab really shook his head in disbelief when he
saw it and were it was set up the other day..he couldn't believe he actually
heard a signal coming from that thing!)

72,
Steve, KD1JV
"Melt Solder"
White Mountains of New Hampshire

<http://www.qsl.net/kd1jv/>

Date: Fri, 7 Dec 2001 17:38:24 -0500 (EST)
From: kaliic <kaliic@prexar.com>
To: <kaliic@qsl.net>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [114203] O.T. Nicad help...
Message-ID: <Pine.LNX.4.33.0112071731390.3803-100000@VinceWerber.org>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi all,

I've got these nicad batteries and no specs for charging...

They are the size, in diameter, of a standard C cell but are twice as long... I was told they were used for aircraft lighting (emergency type?)

I have charged them with a small wall wart charger and they do take a charge but I know this device is not fully charging them... I have used these cells for homemade flashlites and they work well...

Now I want to make up a battery for those winter nights when the power goes down... got to stay on the air ya know... qrp of course 80)

Thanks for your help in advance...

72
Vince
kaliic
-.-.

If you can't convince them, confuse them.
--Harry S. Truman

Date: Fri, 7 Dec 2001 16:44:03 -0600
From: "Stuart Rohre" <rohre@arlut.utexas.edu>
To: <kd7bcy@teleport.com>, <qrp-1@Lehigh.EDU>
Subject: [114204] Preston power supply
Message-ID: <00cc01c17f70\$ac0e7d60\$4e100a0a@rohredt2000>

Preston makes their own transformers, even, for very high quality A/D systems. Looks like you got a power supply from one of the discrete transistor days units.

They probably down regulated the voltage to any ICs in sub regulators, as was done in my Preston Systems SSH and A/Ds. In fact, we had a set, and a fellow research division had a couple of sets.

The Preston we used to have on our now obsolete HP computer system, still has better specs than ANY A/D SSH chip you can buy today! We were told we had the toughest design spec they ever had to meet, but they did it. Gave us 20 years of good service, without ever having power supply problems.

I would have to look for our docs to see if our supplies were similar to the one you have acquired.

A very fine gentleman to deal with at Preston is Charlie McGuire, the Vice President, as is the President, Bernie Spear. Don't be surprised if either of them answers the phone, it is that kind of company! Spent some nice times at their old plant in Anaheim, and got to see the new one as well!

BTW, you likely have a linear power supply, not a switcher. They had very conservative, low noise designs, with shielded transformers.

Is the supply you have a stand alone chassis, or something that goes inside another chassis?, (which is the type we had).

72,

Stuart K5KVH

Date: Fri, 7 Dec 2001 17:50:05 -0500
From: "Brice D. Hornback" <bdh@cyberbound.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [114205] WANTED: kits and stuff
Message-ID: <1e3101c17f71\$8382bd60\$7001a8c0@lwrnc1.in.home.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

WANTED:

VU Mini-Transmitter / Transceiver (kit or built)

FOXX Transceiver (board, kit, or built) - Made available by Kanga. NOT the FOXX-2. I'm looking for the "original" board that did not use a LM386.

Note: the FOXX-2 boards are marked "FOXX" but use a LM386 audio amplifier

IC.

STX - The "Simple Transmitter" by George Burt - GM30XX From SPRAT Summer 1983 - Boards were made available by Kanga

NorCal Forty-9er (49'er) REVA (board, kit, or built)

NorCal Forty-9er (49'er) REVB (board or kit)

KnightLites KnightSMiTE (kit)

WA6BOY Contest Pixie (kit, or built) - Must be original from the "Great Dayton Building Contest 1995" and include documentation to support this - not a new HSC version of the Pixie2

Other micro-sized QRPp radios not mentioned elsewhere.
(I don't know of them all yet, so if you have something... please let me know.)

Prototypes of ANY of the club or commercial kits.

Original documentation, notes, schematics drawn on napkins, etc. for ANY of the club or commercial kits (Note: I would prefer the "originals" but photocopies or scans are fine.)

Please reply direct.

72/73 DE KA8MAV (Brice)
Indianapolis, IN EM79au
QRPp-I #1, QRP ARCI #10972, QRP-L #2360, ARRL
KLQRP, FPQRP -156, ARS #1,138, NETXQRP #27
AOL Instant Messenger ID: ka8mav

QRPp International Radio Club
Tiny-Tornado Transceiver Kits
<http://www.QRPp-I.com>

Date: Fri, 7 Dec 2001 18:35:33 -0500
From: "Brian" <brian@iquest.net>
To: <bdh@cyberbound.net>,
"Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [114206] Re: WANTED: kits and stuff
Message-ID: <005401c17f77\$de774a00\$6c352bd1@bmurrey2K>
MIME-Version: 1.0

Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Brice do you want to borrow these or own these?

----- Original Message -----

From: "Brice D. Hornback" <bdh@cyberbound.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Sent: Friday, December 07, 2001 5:50 PM
Subject: WANTED: kits and stuff

> WANTED:
>
> VU Mini-Transmitter / Transceiver (kit or built)
>
> FOXX Transceiver (board, kit, or built) - Made available by Kanga.
NOT the
> FOXX-2. I'm looking for the "original" board that did not use a
LM386.
> Note: the FOXX-2 boards are marked "FOXX" but use a LM386 audio
amplifier
> IC.
>
> STX - The "Simple Transmitter" by George Burt - GM30XX From SPRAT
Summer
> 1983 - Boards were made available by Kanga
>
> NorCal Forty-9er (49'er) REVA (board, kit, or built)
>
> NorCal Forty-9er (49'er) REVB (board or kit)
>
> KnightLites KnightSMiTE (kit)
>
> WA6BOY Contest Pixie (kit, or built) - Must be original from the
"Great
> Dayton Building Contest 1995" and include documentation to support
this - not
> a new HSC version of the Pixie2
>
> Other micro-sized QRPp radios not mentioned elsewhere.
> (I don't know of them all yet, so if you have something... please
let me
> know.)
>
> Prototypes of ANY of the club or commercial kits.

>
> Original documentation, notes, schematics drawn on napkins, etc. for
ANY of
> the club or commercial kits (Note: I would prefer the "originals"
but
> photocopies or scans are fine.)
>
> Please reply direct.
>
> 72/73 DE KA8MAV (Brice)
> Indianapolis, IN EM79au
> QRPP-I #1, QRP ARCI #10972, QRP-L #2360, ARRL
> KLQRP, FPQRP -156, ARS #1,138, NETXQRP #27
> AOL Instant Messenger ID: ka8mav
>
> QRPP International Radio Club
> Tiny-Tornado Transceiver Kits
> <http://www.QRPP-I.com>
>
>
>
>

Date: Fri, 7 Dec 2001 15:45:42 -0800 (PST)
From: bob parks <rob3ert@yahoo.com>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [114207] FS: Shurr PROFI-2
Message-ID: <20011207234542.64217.qmail@web14707.mail.yahoo.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

Gang--

I am offering for sale a beautiful, BRAND NEW Shurr
PROFI-2 key. I bought it hoping that I'd be able to
use it, but alas, practicing with another key has
convinced me that I'll never be able to use it.

This key is brand new, never used.

I'm asking \$225 plus shipping for it.

If interested, please reply directly to:
rob3ert@yahoo.com

as I get the digest and won't see your interest until tomorrow.

Regards es 72/73

Bob Parks
K6AEC

Do You Yahoo!?
Send your FREE holiday greetings online!
<http://greetings.yahoo.com>

Date: Fri, 7 Dec 2001 18:57:46 -0500 (EST)
From: George Gingell <k3tks@u1.abs.net>
To: Oleg Borodin <master72@lipetsk.ru>
Cc: QRPP-I Club <QRPP-I@yahoogroups.com>, QRP List <qrp-l@Lehigh.EDU>
Subject: [114208] Re: [QRPP-I] microwatting ???????????
Message-ID: <20011207184018.L92230-100000@u1.abs.net>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Oleg,

Here is the email address for one of the Miliwatt Madness Specialists.

Actually there are a number of us over here in USA.

But Paul is the Certified Expert. I can't think of the Fellow in PA who also did some real mW Feats with Paul.

One of the Most Fun Events that we used to do regularly was QRP Beacon Reporting.

Paul set up a QRPP Beacon which would run for hours and transmit a Code Word at each power level. Copying the Code word was reasonable Verification that you had copied the Beacon for an Award.

We also occasionally used the QRPP Mode on the QRP ARCI NETS that I ran for many years.

The way it would work was a person would be secretly designated as the 'milliwatt Qni for that Net. It would be prearranged with me. When we were doing the Net Checkin Period, He would call me as if Checking into the net like everyone else, only he would be running 100 mW or less.

I would pretend not to hear him or else act as though I could barely copy him and ask the others on the net to QSP his QNI. (Relay his Check-in). Then of course when someone would hear him and relay his call, we would have a Valid Two Way QRP /QRPP QSO. Tricky way to introduce QRPers to Milliwatting.

I often Had WA8MCQ/3 as the "Milliwatt Fox" as he was only about 12 Miles from me. Actually, He would be heard in New England with 50 mW or less, I might not actually copy him until he reached QRP levels. Propagation Do Make a Difference. Being too close can also be a disadvantage.

Check with Paul Stroud <aa4xx@ipass.net> for more details on "Milliwatting"

Brice Anderson, W9PNE is also one of the World Champs at "Milliwatting" But I don't think he is on internet. At least I have not heard from in a few years now. He is also big in the Lowfer World.

Sir George, The First :^}

72 ES

QRP DX TU (C) 1986, G. "Danny" Gingell, K3TKS@ abs.net
Former QRP A.R.C.I. Net Manager and Board of Director Member.
Gingell & Company, Ltd. Small Business Telephone Systems
Commercial Locksmith Services (301) 572-6789 Office & Fax
George D. Gingell, Jr. 3052 Fairland Road, Silver Spring, MD 20904-7117
Maryland Milliwatt Club QRP Reference Library, (301) 572-6789 IQRR #1
Maryland Milliwatt Club Founder and Trustee of Club Station - WQ3RP -
Grid Square FM19mb 76.94 W - 39.06 N Silver Spring, MD 20904 QRPea.A.

Collector of Quartz Crystals and Telegraph Keys.

"72" = "Wishing You Good QRP" (C) 1991 Oleg Borodin, RV3GM

On Fri, 7 Dec 2001, Oleg Borodin wrote:

> Hello George,
>
> Friday, December 07, 2001, 5:13:25 PM, you wrote:
>
>
> b> Subject: microwatting ?????? ... sound interesting ??????
>
> I'm very interesting for microwatting. It's really great item not only
> for HAMS but for science also, to learn a condition of SW propagation.

> Try find and read the SPRAT journal # 50 the G4BUE story "Milliwatting
> and microwatting" about his experimentations by microwatting with
> American HAM (don't remember call). They are has a QSO UK/USA with 200
> microwatt output to 4 el Yagi. Chris used step-attenuators also.
> Me, my smallest power QSO was a 50 mW about 1000 km distance.
> --
> Best regards,
> Oleg <mailto:master72@lipetsk.ru>
>
> 72 & 73! de RV3GM/QRP
> G-QRP#4690 QRP-ARCI#10742 QRP-Master#50 QRPP-I#2
>
>
>
> ----- Yahoo! Groups Sponsor ----->
> Break free. Great
> American Smokeout
> <http://us.click.yahoo.com/3vN8tD/.pSDAA/ySSFAA/ELTo1B/TM>
> ----->
>
> To unsubscribe from this group, send an email to:
> QRPP-I-unsubscribe@yahoogroups.com
>
> Check out what's new at the
> QRPP International Web site:
> <http://www.QRPP-I.com>
>
>
>
> Your use of Yahoo! Groups is subject to <http://docs.yahoo.com/info/terms/>
>
>

End of QRP-L Digest 2398

